THE ORAL HEALTH CRISIS IN MASSACHUSETTS:

Report of the Special
Legislative Commission
on Oral Health

Executive Summary

FEBRUARY 2000

SPECIAL LEGISLATIVE COMMISSION ON ORAL HEALTH

Myron Allukian, Jr., DDS, MPH
Boston Public Health Commission

Helene Bednarsh, RDH, MPH
AIDS Action Committee

James Bramson, DDS
Massachusetts Dental Society

Sheila Clancy, CDA, BS
Massachusetts Dental Assistants Association

Stephen Colchamiro, DMD
Brookside Community Health Center

Robert Compton, DDS
Delta Dental Plan of Massachusetts

Jean Connor, RDH
Massachusetts Dental Hygienists Association

Representative Thomas George
Massachusetts House of Representatives

Elizabeth Greene
Massachusetts Division of Medical Assistance

Anita Jones, DDS
Massachusetts Association of Oral Surgeons

Howard Koh, MD, MPH, Chairperson
Massachusetts Department of Public Health

Stuart Merle, DMD
Massachusetts Academy of Pediatric Dentistry

Howard Needleman, DMD
Children's Hospital

Lonnie Norris, DMD, MPH
Tufts University School of Dentistry

Senator Marc Pacheco
Massachusetts Senate

Senator Henri Rauschenbach
Massachusetts Senate

Robert Restuccia
Health Care for All

Jacyn Stultz, RDH
Massachusetts Public Health Association

Representative Kathleen Teahan
Massachusetts House of Representatives

ORAL HEALTH FACTS

Massachusetts Facts

Access to Care:

- More than 2.3 million residents have no dental insurance - compared to 636,000 who have no medical insurance.
- The Division of Medical Assistance receives 4000 calls per month from MassHealth members unable to find dental care. (The second highest number of calls is for mental health services at 700 per month).
- 42% of MassHealth members utilize any dental service each year - compared to 69% of adults overall.
- 86% of practicing dentists are not active providers in MassHealth, contributing to a crisis in access to care for the almost one million Massachusetts residents enrolled in MassHealth.
- MassHealth dental expenditures are declining due to decreasing dentist participation, even though the eligible MassHealth population expanded by 41% over the past 3 years.
- Dental care was the second most requested health service in calls to the Mayor's Health Line in Boston from 1995 - 1998.

Prevention:

- 2.5 million residents - 43% of the population - do not live in fluoridated communities, making the Commonwealth 35th in the nation for this basic public health measure, even though fluoridated water has been shown to reduce tooth decay by up to 40%.
- More than 188,000 elementary school children in non-fluoridated communities go to schools that do not offer fluoride mouthrinse programs, even though fluoride mouthrinse reduces tooth decay by up to 35%.
- About 77-88% of schoolchildren have no dental sealants, according to community surveys, even though dental sealants are an important complement to fluoride as a preventive measure. Massachusetts has no statewide school dental sealant program. The federal government recommends such programs.
- The Commonwealth lacks a surveillance system to monitor the oral health status of its residents.
- Massachusetts ranks 22nd in the nation in the mortality rate for oral cancer. Mortality is closely linked to late stage diagnosis. A study of Boston residents found that adults with oral cancer had an average of 10.5 visits to a healthcare provider in the two years before they were diagnosed with cancer.
- 48% of adults have had at least one tooth removed due to tooth decay or gum disease.
- 22% of elderly residents have no teeth at all.

United States Facts

- Dental caries (tooth decay) is the most common chronic condition of childhood, more common than asthma. Caries is almost wholly preventable.
- Children lose about 632,000 school days and adults lose about 3.6 million workdays annually due to oral health problems.
- 80% of childhood tooth decay is found in only 25% of the population - and disproportionately among low-income and minority children.
- There are significant racial disparities in oral disease. Blacks are four times as likely to have untreated tooth decay as whites. Black survival rates for oral cancer are approximately half that of whites.
- 90% of HIV(+) individuals have oral manifestations of the disease.

EXECUTIVE SUMMARY

The Special Legislative Commission on Oral Health was appointed by Governor Argeo Paul Cellucci and the Massachusetts Legislature in November 1998, as authorized by section 42 of Chapter 170, the Health Access Act of 1997. This Act authorized the Special Commission to investigate multiple aspects of oral health in the Commonwealth, including the mandate to:

- Investigate and study oral health status, effective community prevention programs, and access to dental care services for residents of the Commonwealth;

- Investigate the current status of oral health and care for high-risk populations and low-income and other residents of the Commonwealth and barriers to access for such residents;

- Review options for increasing the provision of dental services to children receiving medical assistance in light of the report by the United States Department of Health and Human Services that only 34% of eligible children receive preventive dental services;

- Examine options for improving provider enrollment in programs of medical assistance, and for public health dental prevention and promotion programs.

The Commission is the first in thirty years to be charged specifically with assessing oral health status in the Commonwealth.

THE IMPORTANCE OF ORAL HEALTH

"You are not healthy without good oral health."

- C. Everett Koop, M.D., Former U.S. Surgeon General

Oral health is inseparable from overall health status. The consequences of poor oral health on affected individuals can include:

- severe acute and chronic pain
- infections, which may become systemic and contribute to other health problems
- impaired eating ability, leading to poor diet and nutritional status
- speech difficulties
- partial or total tooth loss
- negative impact on social and financial well-being due to poor appearance
- the morbidity and mortality associated with oral cancer

Most of these problems are preventable, and early treatment is both cost-effective and critical to preventing later, more serious health problems. Yet oral health status and gaps in access to oral health care have not received the same attention as those in other areas of the health care system. This inattention has substantial costs for affected individuals and society.

Low-income and other vulnerable populations bear a disproportionate burden of poor oral health status, in part because of the lack of adequate public funding for oral health services. At this time in Massachusetts, there is an escalating crisis in access to care for the low-income members of the MassHealth Program caused by a rapidly declining number of actively participating dentists. This crisis threatens to undermine an already ineffective system of dental care for low-income populations in the Commonwealth, with one certain outcome being a further decline in oral health status for high-risk groups.

The federal government has recognized the national consequences of this "neglected epidemic" in oral health and has begun a series of initiatives, as have many states, to re-establish oral health care as a necessary component of overall health care. Massachusetts should do the same.

Oral Diseases and Conditions

Several major diseases or conditions contribute to poor oral health:

- Dental caries
- Early Childhood Caries ('baby bottle tooth decay')
- Periodontal disease
- Oral cancer
- Orofacial injuries
- Malocclusion
- Cleft lip and cleft palate
- Oral implications of systemic disease
- Temporo-Mandibular Joint Dysfunction

FINDINGS OF THE COMMISSION

Oral Health Status

Massachusetts lacks the data to comprehensively evaluate the oral health needs of its residents. The Commonwealth does not have an ongoing statewide surveillance system to assess oral health status: only two statewide assessments of oral health in the Commonwealth have been conducted in the past half-century, both of which focused on the health status of school-age children.

The Commission used information available from community studies, survey results from the Behavioral Risk Factor Surveillance System (BRFSS), cancer mortality statistics, and national data to compile a composite picture of the current health status of Massachusetts' residents. The development of an oral health data and information system is a necessary step to more fully monitor and evaluate oral health status in the Commonwealth.

Children

Nationally, there has been significant improvement in overall oral health status among children in the past several decades, due in large part to the decreasing incidence of dental caries through exposure to fluoride. However, **dental caries remains the most common childhood chronic disease**, affecting 84% of children by age 17. Almost one-third of cavities in 6-8 year olds have not been repaired, **a higher percentage than 10 years ago**. Early childhood caries ("baby bottle tooth decay"), while completely preventable through proper infant feeding methods, affects approximately 5-10% of young children.

While dental disease has become less prevalent among most children, it remains a significant health problem for low-income and minority children, **with 80% of caries concentrated in just 25% of children**. Poor children ages 6-12 years suffer twice the decay rate of children with family incomes over the poverty level.

Local assessments conducted in several Massachusetts communities with high representation of low-income children suggest that the higher rates of dental decay seen nationally among low-income children are also evident in the Commonwealth. In Cambridge, Lawrence and Boston, dental screenings found that 38-48% of children needed restorative dental care, with 9-14% requiring immediate referral for treatment. Students at one Boston high school had four times as many cavities as the national average.

The reasons for the disproportionate burden of dental disease among low-income and minority children are complex and not entirely understood. However, it is clear that access to preventive dental care and treatment is a significant barrier for low-income children and their families, and that lack of preventive dental care contributes to diminished oral health status. As described in more detail in the Access to Dental Care section below, the difficulties MassHealth families in Massachusetts experience when trying to find dental care has reached a crisis level.

Other common sources of diminished oral health status among children and adolescents are untreated malocclusion (poorly aligned teeth) and dental trauma, including fractured teeth from unintentional injuries. Mouthguard use during sports participation is an effective but underutilized preventive method for decreasing this frequent cause of dental trauma.

"I provide routine primary care to low-income children from Dorchester and surrounding neighborhoods at [a] health center. I was amazed to find that many children and teens had never been to a dentist, and of those who had been, they received dental care only sporadically. When I examine the children's mouth, I often see black teeth rotted down to the roots, a sight we should never see in this country."

- Boston Nurse Practitioner

Adults

Adult oral health status has also improved in recent years. Fewer adults have missing teeth, and many fewer have lost all their teeth. In Massachusetts, 52% of adults have all their teeth and 22% of the elderly have no teeth at all. Because untreated dental caries and periodontal disease are progressive, the disease burden of poor oral health accumulates as one ages. Ninety-four percent (94%) of adults have evidence of past or present tooth decay.

The risk of oral cancer for those engaging in high-risk behaviors - tobacco use and heavy alcohol use - also increases with age. Massachusetts ranks 22nd in the nation in the mortality rate for oral cancer. When oral cancer is detected early, the prognosis for survival improves greatly. Dental health care workers are more likely to screen for oral cancer than are medical providers. A study of Boston adults with oral cancer, the majority of whom had late-stage diagnosis, found that they had had multiple visits to health care providers in the two years preceding diagnosis.

Minority adult populations nationally have poorer oral health status than do whites. Black adults are four times as likely to have untreated tooth decay, and are less likely to receive preventive dental care. The Commission found no Massachusetts studies that assessed racial disparities in these aspects of oral health status.

Blacks also have a significantly higher mortality rate for oral cancer. In Massachusetts, black males have a 28% five-year survival rate, compared to 53% for whites.

Vulnerable Populations

Certain groups, in addition to low-income and minority populations, are at higher risk for poor oral health than the general population. These include the elderly, the homebound, nursing home residents, the disabled, the homeless, people with HIV/AIDS, and refugees and immigrants. The few studies assessing the oral health needs of these populations in Massachusetts communities confirm their high rate of unmet oral health needs.

Access to Dental Care

While primary prevention must be the leading approach to maintaining oral health, even individuals with good oral health status need regular preventive dental care. For those with untreated oral diseases or conditions, lack of timely dental care can result in escalating oral problems, which may be more costly and difficult to treat. Ready availability of affordable dental care is thus a necessary component of good oral health status.

Although data on dental providers in Massachusetts has certain limitations, it does not appear that there is an overall shortage of dentists in the Commonwealth. There are an estimated 4,692 dentists practicing in 6,065 dental office locations. The overall ratio of one dentist for every 1,304 residents is higher than the national average. The distribution of dentists is more heavily concentrated in the eastern part of the state. There are also an estimated eighty communities that lack any dentist, particularly in the western part of the Commonwealth, although many are too small to sustain a dental practice.

The major barriers to access statewide are the declining numbers of dentists participating in the MassHealth Program; the limited access to affordable comprehensive dental care for the uninsured, especially low-income uninsured residents; and the lack of access for particular high-risk populations.

- More than 2.3 million Massachusetts residents have no dental insurance. Those least likely to have insurance are adults and their family members where the adults work in small, low-paying businesses. Their only recourse is to pay out of pocket for services that can be quite expensive. Cost of care is one of the most significant reasons people report for not seeking dental care when they believe they have a need.

- Medicare does not cover dental care except in cases of trauma, giving elders one of the highest rates of uninsurance for dental care. As more elders benefit from preventive services, the percentage with significant or total tooth loss has decreased, thus increasing the need for ongoing restorative care and contributing to a critical access situation.

- Children's Medical Security Program (CMSP), the Massachusetts primary health care insurance program available to all uninsured children not eligible for MassHealth, has had dental coverage as an option in its legislative enabling language but is only now implementing it as a benefit. There are more than 18,000 children enrolled in CMSP, of whom one-third are in families with household incomes below 200% of the poverty level.

- MassHealth, the Massachusetts Medicaid program, does cover dental care. However, 86% of dentists in the Commonwealth are not active MassHealth providers. This percentage is increasing as more dentists leave the program, citing inadequate reimbursement rates, contributing to a crisis in access to care for the almost one million MassHealth members in Massachusetts. This growing crisis is discussed extensively below.

- Very few minorities enter dentistry, and private dental practices do not generally have bi-lingual staff or access to translation services. Linguistic and cultural barriers to care may therefore be high.

- Disabled individuals and those with special health care needs, such as HIV, face multiple barriers to finding accessible care, including discrimination.

Access to Care for MassHealth Members

The Division of Medical Assistance receives 4000 calls per month from MassHealth members unable to find dental care, more than for any other service. The next most requested service, mental health, receives 700 calls per month.

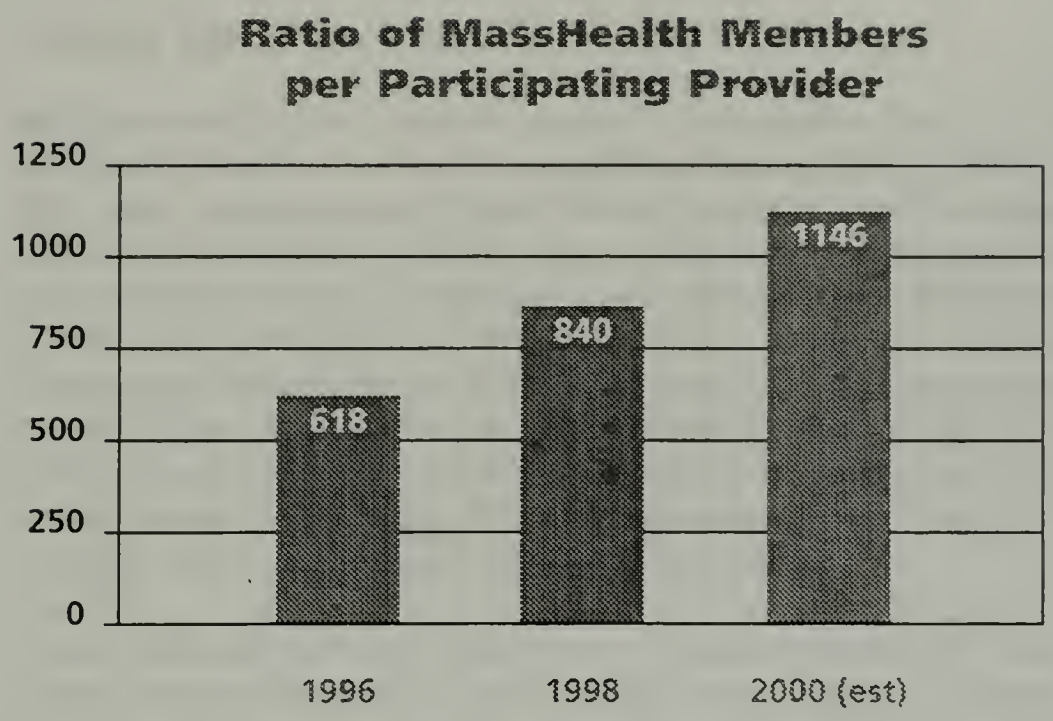
One of the Commission's most significant findings is that the dental care delivery system for MassHealth members is on the verge of collapse. Data from the Division of Medical Assistance (DMA) show that only 42% of MassHealth members received any dental care in FY 1998, a decrease from 47% in FY 1996. By contrast, national data show that on average, 57% of the general population and 70% of those covered by private dental insurance utilize at least one dental service each year. Yet Medicaid recipients nationally have unmet dental needs two to three times those of the general population.

The primary barrier to improving utilization of dental services by MassHealth members is the critical and growing shortage of participating dentists. The number of dentists actively participating in the MassHealth program is declining. In FY 1999, only 971 dentists - 20% of the estimated 4692 practicing dentists in the Commonwealth - submitted any billing claims to MassHealth, a 19% decline from 1996. However, even these numbers overstate participation, because about 30% of these dentists bill less than $5000 per year, which represents a very small fraction of a typical dentist's annual revenue. The number of actively participating dentists is probably closer to 680.

At the same time that fewer dentists are willing to take MassHealth patients, the number of MassHealth members has increased 41% in the past two years as a result of expanded eligibility criteria and aggressive enrollment efforts. The ratio of MassHealth members to available dentists will almost double from FY 1996 through FY 2000, even assuming no further dentist decline in FY 2000. While the estimated statewide ratio has increased to 1146 MassHealth members for every actively participating dentist (see chart), the Commission recommends that the maximum ratio should be no greater than 500:1.

"I am one of the few dentists still in the program in this area. My office gets twenty to thirty calls a day from patients looking for a MassHealth dentist. My name is still on the list, but I can't do this anymore. I feel bad for the patients, but I can't run my practice like this. I'm overwhelmed."

- Leominster Dentist



Significant regional maldistribution of participating dentists exists within this critical overall shortage. In some of DMA's 40 sub-regions, provider capacity is so low that even if all participating providers only saw MassHealth members, they could not meet the need. **Most of the sub-regions need 3 to 7 times the number of currently participating dentists to establish minimally adequate MassHealth provider capacity**.

Dentists in Massachusetts cite a number of reasons for their declining participation, similar to those found by the federal Department of Health and Human Services in its 1994 study of the dental needs of children in the Medicaid program. One of the most significant factors is the long-standing inadequacy of the MassHealth fee schedule. Present reimbursement rates are so dramatically below current market levels that dentists who choose to treat MassHealth patients receive fees that cover only about 75% of their direct costs of providing the service.

DMA reimbursement rates, for a subset of all dental procedures, were last raised in 1994. In the subsequent five years, the dental consumer price index has risen 25%. Overall dental rates were last raised in 1988, by 4.3%.

Without rapid and significant change, the Commission anticipates that the poor dentist participation rates will further deteriorate, creating a deepening crisis in dental care access for MassHealth members. The immediate first step must be to increase reimbursement rates for dental procedures to cover dentists' costs in providing the care. Reforms in the administration of the MassHealth program are also needed, and DMA has begun implementation of many of these, including a mechanism for dental providers to set caseload capacity.

I'm just waiting to see what happens with the fee schedule and the program changes. If there isn't a significant increase in fees soon, I'm resigning. There hasn't been an increase in over 10 years. I'll keep my long-term patients. I don't mind treating them at no charge, but unless there are drastic changes soon and a reason for me to stay in the program, I'm gone."

- Lynn Dentist

Safety Net Providers

Massachusetts has an array of programs and agencies that offer dental services to those who are unable to obtain access to a traditional dental office. Twenty-three community health centers, seven hospital-based dental clinics, three dental schools, seven dental hygiene schools and several dental assisting schools offer services to the general public either on a sliding fee scale or flat reduced rates. The Massachusetts Dental Society administers a program, Dentistry for All, in which dentists voluntarily participate in offering reduced-fee services to qualified low-income uninsured patients. Other safety net programs serve special populations with barriers to dental care, such as the HIV Dental Ombudsperson Program and the Dental Program for the Developmentally Disabled. DMA has recently funded special infrastructure-building projects in six low dental access areas of the Commonwealth to enhance the delivery of dental care and increase utilization through safety-net providers.

While these safety-net providers are invaluable resources in filling gaps in care in many areas of the Commonwealth, they do not and cannot replace an effective private dental delivery system. They are not uniformly distributed throughout the state and they serve only a small portion of the Commonwealth's needy residents. Additionally, most safety-net providers also serve many MassHealth members and are struggling under the same inadequate reimbursement rates as are dentists in private practice. One community health center closed its dental practice in the past year. Other safety net providers report that they are uncertain of their future ability to continue offering dental services to underserved populations if the reimbursement structure does not improve.

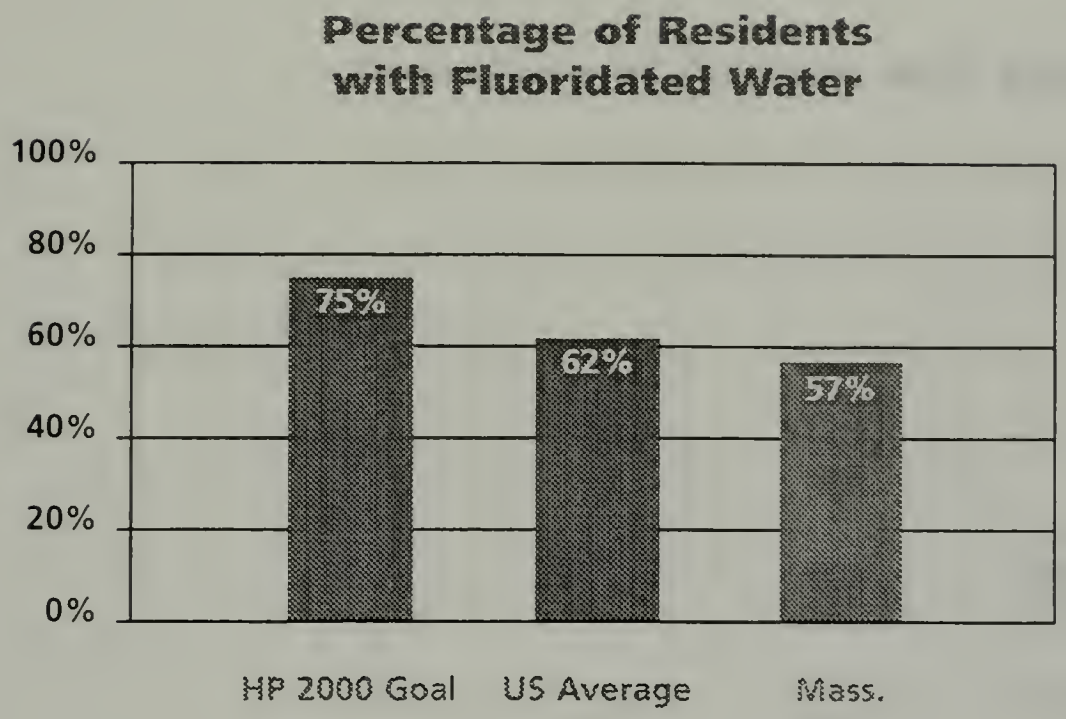
Prevention of Oral Disease

In oral health, effective primary prevention measures are well established, safe, and cost-effective. Yet they are only partially implemented in Massachusetts, which lags behind many other states.

Fluoride

Fluoridation of community water supplies is one of the major public health advances of the 20th century. Fluoride, a naturally occurring substance in water, substantially reduces tooth decay when available in appropriate concentrations. Because most water supplies do not contain the recommended concentration, it is adjusted at the source of the supply. Living in a fluoridated community from birth reduces tooth decay as much as 40%.

Despite these proven benefits, **Massachusetts lags behind many states in implementing fluoridation**. Only 57% of Massachusetts residents live in a fluoridated community, ranking the Commonwealth 35th in the nation for this basic public health measure (see chart). While many communities do not have public water supplies, 59% of communities with public water supplies are not fluoridated.



Fluoridation is safe, inexpensive, and practical. Each dollar spent on fluoridation results in up to $80 savings in treatment costs. Yet 2.5 million Massachusetts residents do not live in fluoridated communities.

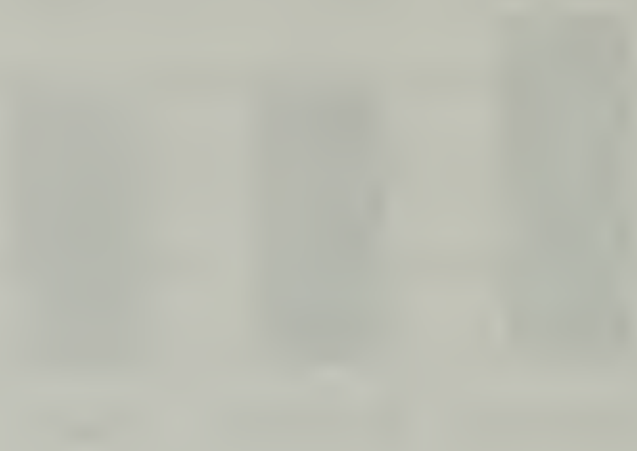
In communities that don't or can't fluoridate their water supplies, it is important that children in particular receive fluoride through other means. Pre-school and school-based fluoride programs are effective methods to reach high-risk children. Fluoride mouthrinse programs cost only 78 cents per child per school year and decrease the amount of tooth decay in children using it by up to 35%.

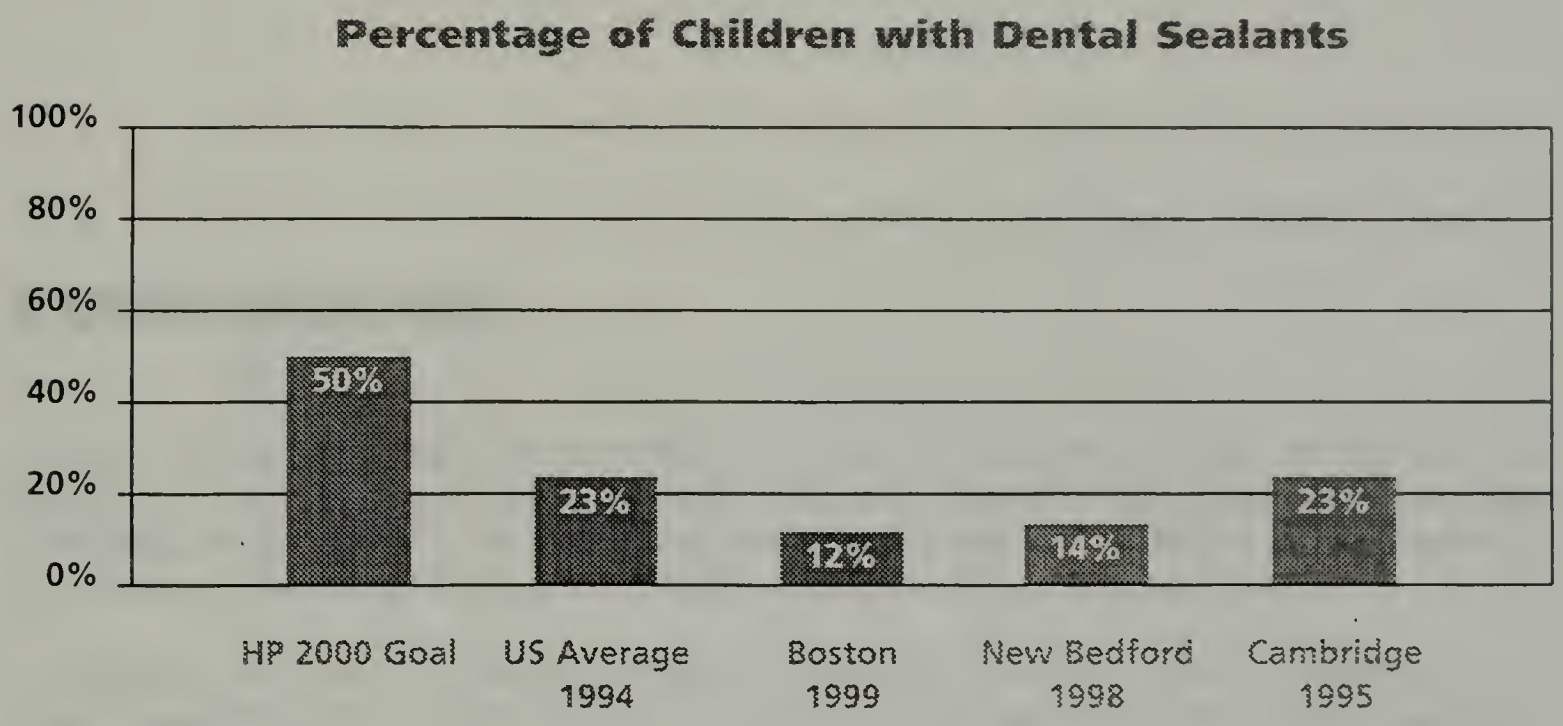
MDPH currently supports fluoride mouthrinse programs in 246 schools in 141 communities, serving approximately 55,000 students. Despite the proven efficacy of these programs, 90 non-fluoridated communities in the Commonwealth do not have schools participating in fluoride mouthrinse programs.

Dental Sealants

The application of dental sealants - thin resin coatings applied to the chewing surfaces of molar teeth by a dental health care worker - is an important complementary prevention practice to fluoride. Sealants are most effective when applied soon after molar eruption, at ages 6-8 for first molars and again at ages 12-14 for second molars.

Nationally, approximately 23% of 8 year olds have at least one sealed permanent tooth, far short of the Healthy People (HP) 2000 goal of 50%. Although the federal government recommends statewide surveillance programs to monitor the percentage of third-graders with dental sealants, Massachusetts lacks a system to determine the prevalence of sealant application. Several local community surveys have found sealant application rates of only 12-23% of school-children examined (see chart).





One of the most effective methods for implementing sealant programs is through school-based programs. There is no state-supported sealant program, and only one community in the Commonwealth operates a school-based program.

Other Prevention Initiatives

Individual preventive behavior is an important component of oral health. Regular toothbrushing with fluoride toothpaste; flossing; limiting the intake of sugary foods-especially among children; and receiving regular preventive dental exams and cleanings are all necessary for good oral health.

Tobacco use is a known risk factor for many diseases, including oral cancer and periodontal disease. **Seventy-five percent of all oral cancers are attributable to tobacco** - smoked, chewed or spit. Heavy alcohol use in itself is also a risk factor for oral cancer and in combination with tobacco use contributes to even higher risk.

Injury prevention is an important component of oral health prevention programs. Protective mouthguard use during contact sports is an effective method to prevent unintentional injuries to the mouth, teeth and other facial areas. The Massachusetts Interscholastic Athletic Association (MIAA) has taken a proactive stance in requiring mouthguards for organized athletics and has collaborated with the Massachusetts Dental Society in identifying dentists who will make mouthguards available for a nominal fee. It is important that schools, coaches and families emphasize compliance with these standards and that mouthguard use in other levels of sports and in informal sports participation also is emphasized.

CONCLUSIONS

Overall oral health has improved nationally in the past four decades, in large part due the role of fluoride in reducing tooth decay. While Massachusetts residents undoubtedly have benefited from the same trends, the Commission was unable to evaluate the full extent of need among our residents, because of the lack of an adequate oral health surveillance system.

Continuing public health prevention efforts to implement community water fluoridation, school-based fluoride mouthrinse programs and the widespread application of dental sealants in age-appropriate schoolchildren are needed to further reduce the prevalence of dental caries.

Regular preventive dental care is necessary even for those with good oral health status, and critically important for those with untreated oral diseases or other conditions. Low-income and other vulnerable population groups continue to experience higher levels of dental disease than the general population. Community studies in Massachusetts confirm the high level of disease found in national studies for these populations. Yet these populations have even less access to care in Massachusetts today than do those with lesser oral health needs.

Adequate funding for MassHealth and CMSP dental programs and for public health prevention programs are necessary investments for the good oral health of Massachusetts residents.

Special Legislative Commission on Oral Health

MAJOR RECOMMENDATIONS

1. Improve access to public and private dental insurance for residents of the Commonwealth, to increase access to dental care.

2. Improve access to oral health screening and treatment services for all residents of the Commonwealth by increasing the private and public capacity to provide dental services.

3. Promote statewide individual and population based preventive services and programs, especially for children and high-risk populations.

4. The Department of Public Health should develop and implement an oral health data and information system to monitor oral health status as well as access and utilization of oral health preventive and treatment services for all residents of the Commonwealth.

5. A Special Advisory Committee on Oral Health, whose primary focus will be to improve the oral health of residents of the Commonwealth, should be established as an ongoing advisory body for the Department of Public Health, the Division of Medical Assistance and other relevant state agencies.

RECOMMENDATIONS

1. Improve access to public and private dental insurance for residents of the Commonwealth, to increase access to dental care.

Increase funding for the Division of Medical Assistance to ensure fair reimbursement levels for the MassHealth dental program.

- Increase the MassHealth fee schedule to 65% - from the current 50% - of the statewide median fees, estimated to cost about $30 million at current levels of member utilization.

- Increase the MassHealth fee schedule every two years in significant increments in order to increase provider participation and member utilization.

- Increase the number of dentists enrolled in MassHealth by using various strategies- such as establishing caseload capacity, safety-net provider incentives, and other administrative and procedural improvements.

Encourage all employers who provide medical health benefits to also provide dental health benefits and create incentives for employers to provide these benefits. All third party dental plans should include and promote preventive services such as prophylaxis, periodic recall examinations, fluoride treatments, sealants, mouthguards, oral cancer screening for high-risk patients, oral health education, nutrition counseling, and tobacco cessation intervention.

Fund dental health benefits as a component of the Children's Medical Security Plan for all eligible children and youth, through age 18. At a minimum, dental health benefits should include the same coverage as that for children under MassHealth.

Assess the need for a dental health care assistance program for adults and elders who do not have access to employer-based insurance or other dental coverage. This may include developing eligibility criteria, premium levels, and scope of service.

2. Improve access to oral health screening and treatment services for all residents of the Commonwealth by increasing the private and public capacity to provide dental services.

Fund expansion of the service capacity of safety-net providers, such as community health centers, and expansion to locations where residents still face barriers to care.

- Develop and improve safety-net provider locations:

    a. Provide funds for capital, expansion, start-up, and initial operating expenses at safety-net provider locations, with a special focus on community health centers and hospitals, to fund more dental services, or to start up dental programs where there are currently none.

b. Provide technical assistance for safety-net providers to enhance business and financial stability.

c. Identify and submit applications for all underserved areas within the Commonwealth that may be eligible for federal dental Health Professional Shortage Area designation.

- Facilitate and improve human resources associated with safety-net providers:

a. Create state loan forgiveness and tuition reimbursement programs for dentists, hygienists and dental assistants who commit to serve in underserved areas or to serve high-risk populations for two or more years.

b. Provide low cost loans to establish dental offices in underserved areas.

c. Investigate the creation of a state Dental Service Corps, which would focus on providing care in low-access areas.

d. Explore state tax credits for dentists who establish dental offices in under-served areas and/or participate in MassHealth.

e. Develop strategies to increase dental, dental hygiene, and dental assisting schools' enrollment and professional participation for cultural, linguistic, and racial minorities and low-income students.

f. Create scholarships, state tuition reimbursement, and loan forgiveness programs for under-represented minorities, including African-American, Hispanic, and Native American students, who commit to serve in underserved areas for two or more years so that the dental workforce reflects the population's diversity, and to encourage under-represented populations to choose dental careers.

Fund grants and/or demonstration programs designed to meet community-identified needs and fill current service gaps. These programs should be designed to increase access to care and participation of providers in community-based programs. These may include community-based programs for:

- Improving children's oral health: programs for Early Childhood Caries, preventive dental sealants, school-based oral health, and the detection and treatment of cleft lip/palate.

- Improving access for underserved adult populations, such as interpreter services for linguistic minorities; specialized outreach to cultural and racial minorities, the homeless, persons with HIV, and low-income individuals; and mobile dental care for the homebound, elderly, disabled and rural populations.

- Targeting services across the lifespan for people with special needs, including individuals with chronic illnesses and disabilities; children and youth in the custody of the Department of Social Services or the Department of Youth Services; persons with HIV; and the developmentally disabled.

3. Promote statewide individual and population based preventive services and programs, especially for children and high-risk populations.

State and local agencies should develop comprehensive oral health prevention programs.

- The Massachusetts Department of Education and the Massachusetts Department of Public Health should develop and implement a comprehensive school-based oral health program that includes, but is not limited to:

  a. Oral health education programs for all children in grades K-12

  b. Oral health services

     - Developing school-based fluoride programs for children living in non-fluoridated communities.

     - Encouraging development of oral health screening and dental sealant programs for high-risk children.

  c. Providing education and training for school nurses and physical education teachers on oral health, oral diseases, and injury prevention.

  d. Encouraging all schools to limit the amount of sugary foods and candy available at schools and in vending machines.

  e. Providing education on injury prevention.

  f. Reviewing and revising the current sports regulations and guidelines regarding mouthguard use in contact sports to improve compliance.

- Develop and implement a statewide early childhood oral health program for the prevention and treatment of Early Childhood Caries.

  Provide oral health education and training to perinatal and pediatric providers and health professionals and paraprofessionals working with the Women, Infants and Children Supplemental Feeding Program (WIC), Headstart, Home Visiting, Early Intervention, and daycare programs.

- Develop an oral cancer prevention program, to include:

  a. Public education on oral cancer, with a focus on high-risk populations.

  b. Education and training to primary care providers, hospital personnel, nursing homes, and homeless shelters.

  c. Development and distribution of alcohol and smoking cessation education materials.

The Massachusetts Department of Public Health should enhance its primary prevention program and increase funding for a comprehensive statewide fluoridation program. This program should include but not be limited to:

- Providing capital funds to non-fluoridated communities for equipment, supplies, and facilities to implement fluoridation.

- Providing capital funds to fluoridating communities for fluoridation equipment and facilities that need to be upgraded or expanded.

- Providing education, consultation, promotion, and technical assistance on fluoridation to communities, local boards of health, health professionals, and water engineers.

- Developing a statewide program to increase the number of fluoridated communities and to monitor those communities that are fluoridating.

All cities and towns that request bond approval for water facility upgrades should include fluoridation capability in their plans.

The Massachusetts Department of Public Health should, in collaboration with other state agencies, private and non-profit dental providers, and other dental experts, develop and implement comprehensive public oral health education programs for all ages, and especially for high risk groups, on:

- Early Childhood Caries and dental caries
- Periodontal disease
- Malocclusion
- Injury prevention
- Oral cancer
- Infectious diseases
- HIV

Promote other strategies to maintain population based oral disease prevention programs.

- Encourage physicians, nurses and other primary care providers to screen for oral diseases as part of routine health care.

- Enforce long term care facility regulations that require these facilities to provide oral examinations and initiate necessary prevention, education and treatment no later than 30 days after the patient enters the facility.

- All schools that train health care professionals in Massachusetts - including dental, medical, nursing and public health schools - should stress the importance of individual and population based oral health programs and disease preventive services in their curriculum. These schools should also include discussions of the social responsibility associated with oral health careers as well as all health care work.

- The Massachusetts Department of Public Health should provide training for dental health providers and other health professionals on identification, management, and provision of services to meet the unique needs of special populations such as persons with HIV, homebound individuals, the developmentally disabled, residents of long-term care facilities, and children or youths in the custody of the Department of Social Services and the Department of Youth Services.

4. The Department of Public Health should develop and implement an oral health data and information system to monitor oral health status as well as access and utilization of oral health preventive and treatment services for all residents of the Commonwealth.

This system should include the following:

- A comprehensive oral health survey every 10 years beginning with a baseline survey within two years.

- An oral health component in ongoing data collection activities (including Behavioral Risk Factor Survey, Cancer Registry, and birth defects monitoring system).

- A standard Oral Health Report in MassCHIP (Massachusetts Community Health Information Profile) made available electronically to all persons seeking Massachusetts' population based oral health statistics.

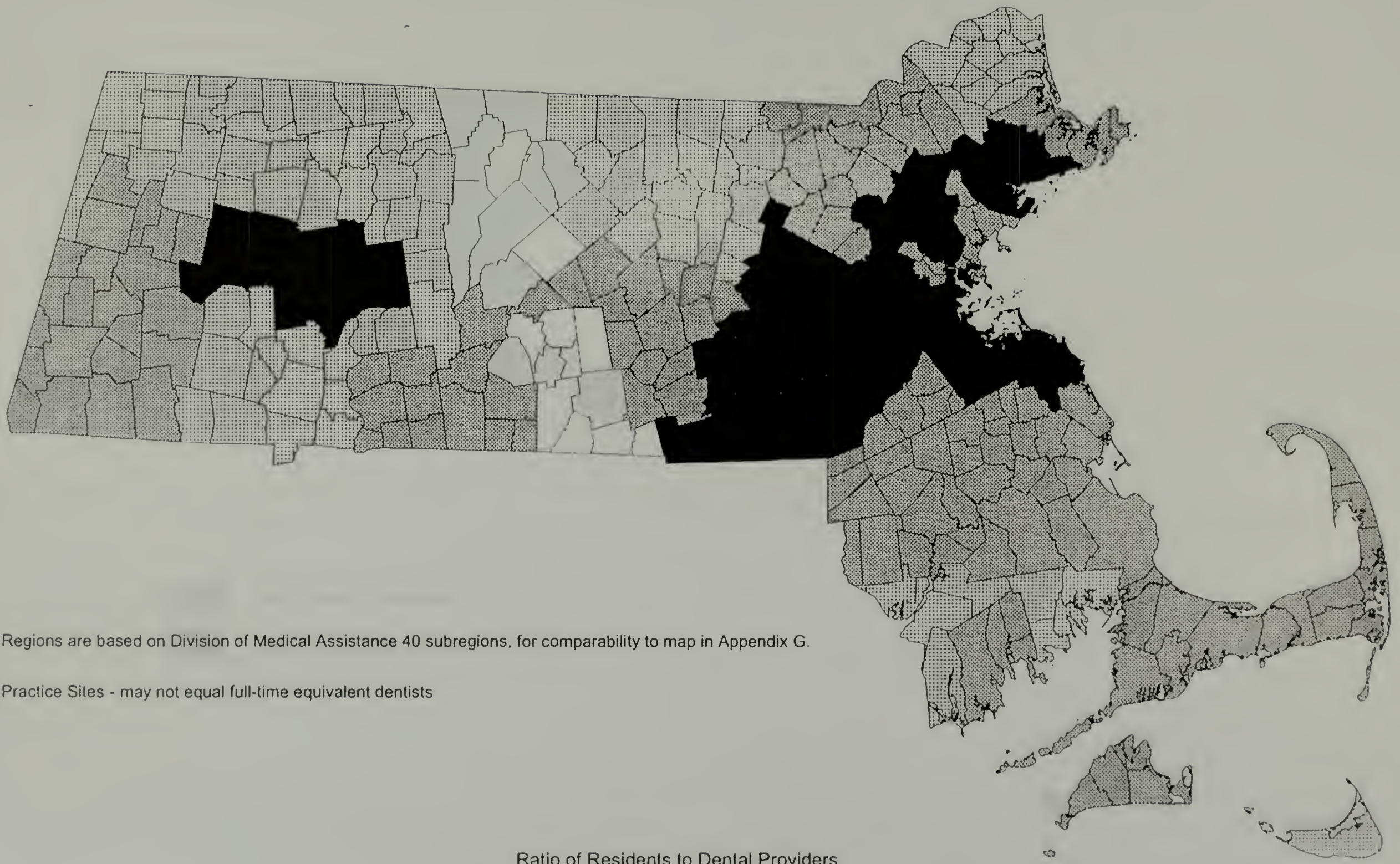
5. A Special Advisory Committee on Oral Health, whose primary focus will be to improve the oral health of residents of the Commonwealth, should be established as an ongoing advisory body for the Department of Public Health, the Division of Medical Assistance and other relevant state agencies.

- Current members of the Special Commission on Oral Health should be invited to serve on the Special Advisory Committee.

- The Committee should select additional members as appropriate.

- The Commissioner of the Department of Public Health should appoint the chairperson.

Ratio of Residents to Dental Providers (Practice Sites) by Region



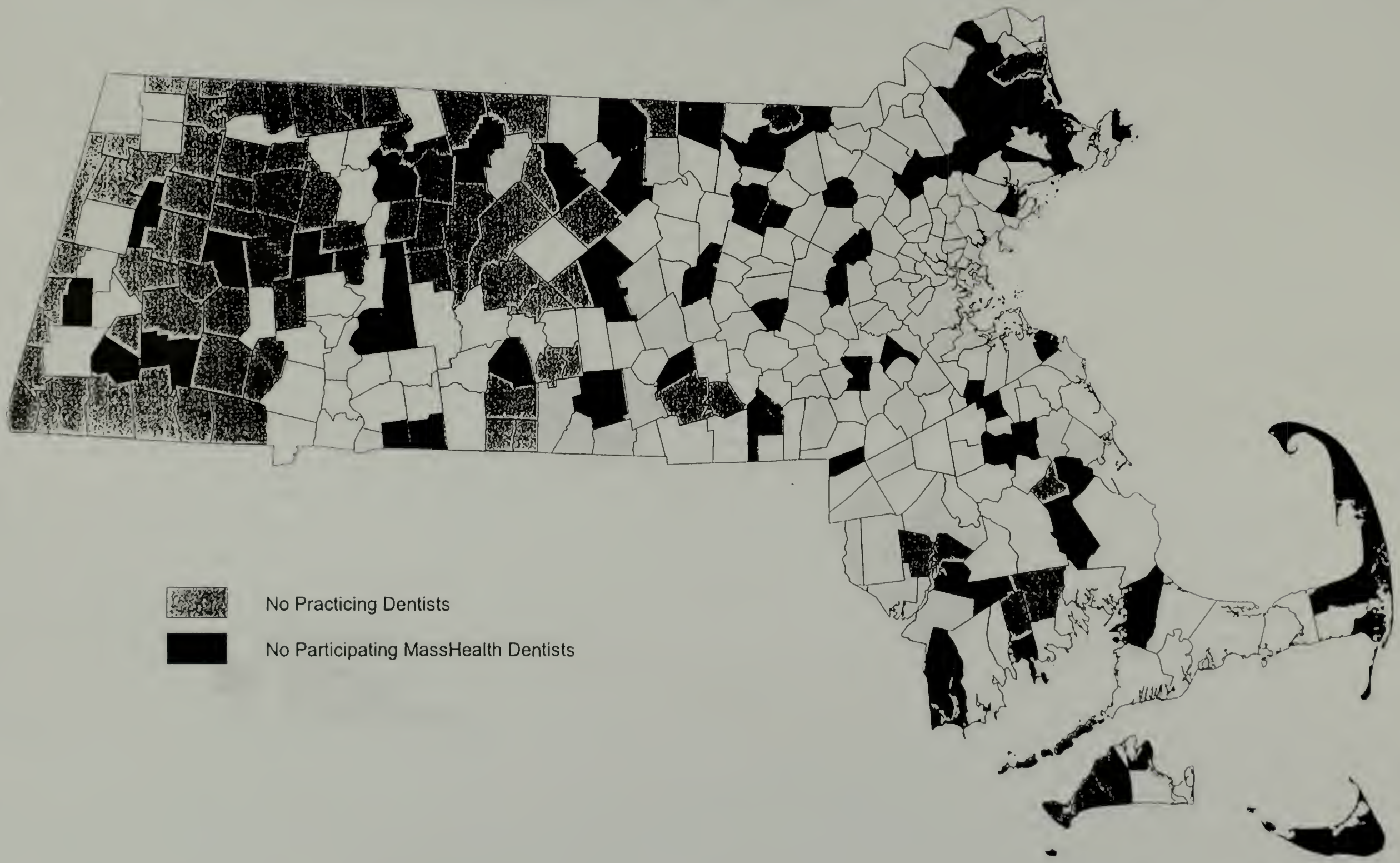
Regions are based on Division of Medical Assistance 40 subregions, for comparability to map in Appendix G.

Practice Sites - may not equal full-time equivalent dentists

Ratio of Residents to Dental Providers

<1001: 1	1501:1 -2000:1	> 2501:1
1001: 1-1500:1	2001:1 -2500:1	

Communities with No Dentists or no MassHealth Dentists



No Practicing Dentists

No Participating MassHealth Dentists

Fluoridation Status of Massachusetts Communities